



ABSTRACT

5 A synthetic pulmonary surfactant comprising a pharmaceutically acceptable phospholipid admixed with a polypeptide comprising at least 10 amino acid residues and no more than about 60 amino acid residues, said polypeptide including a sequence having alternating hydrophobic and hydrophilic amino acid residue regions represented by the formula $(Z_a U_b)_c Z_d$, wherein:

10 Z is a hydrophilic amino acid residue independently selected from the group consisting of R and K;

15 U is a hydrophobic amino acid residue independently selected from the group consisting of V, I, L, C, Y and F;

20 a has an average value of about 1 to about 5;
b has an average value of about 3 to about 20;
c is 1 to 10; and
d is 1 to 3;

said polypeptide, when admixed with a pharmaceutically acceptable phospholipid, forming a synthetic pulmonary surfactant having a surfactant activity greater than the surfactant activity of the phospholipid alone.